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L17: Entry 2 of 5

File: USPT

Nov 3, 1992

DOCUMENT-IDENTIFIER: US 5160418 A

TITLE: Enzyme electrodes and improvements in the manufacture thereof

DEPR:

As already indicated, the invention relates particularly to glucose oxidase electrodes, i.e. in which the immobilised enzyme is a glucose oxidase, but it will be apparent that other oxidoreductases can be used, although not always with equivalent effect. This is not necessarily due to any inherent ineffectiveness of the enzyme, but to other factors. For example, in the determination of uric acid using uricase, the uric acid substrate itself undergoes electrochemical oxidation at the base electrode, thus largely masking any effect from the enzyme. However, other suitable oxidoreductases include lactate oxidase, galactose oxidase, cholesterol oxidase and other peroxide producing enzymes as well as combinations of immobilised enzymes, including combinations of a non-oxidase and an oxidase, the first acting on a substrate of interest to produce an oxidisable substrate for the oxidase, the latter acting on the oxidisable product to produce a measurable current which is proportional to the concentration of the substrate of interest. One such combination is the combination of beta-galactosidase and glucose oxidase (for the quantitative determination of lactose), or the combination of a beta-glucan depolymerising enzyme, beta-glucosidase and glucose oxidase (for the determination of beta-glucans).

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L19: Entry 1 of 4

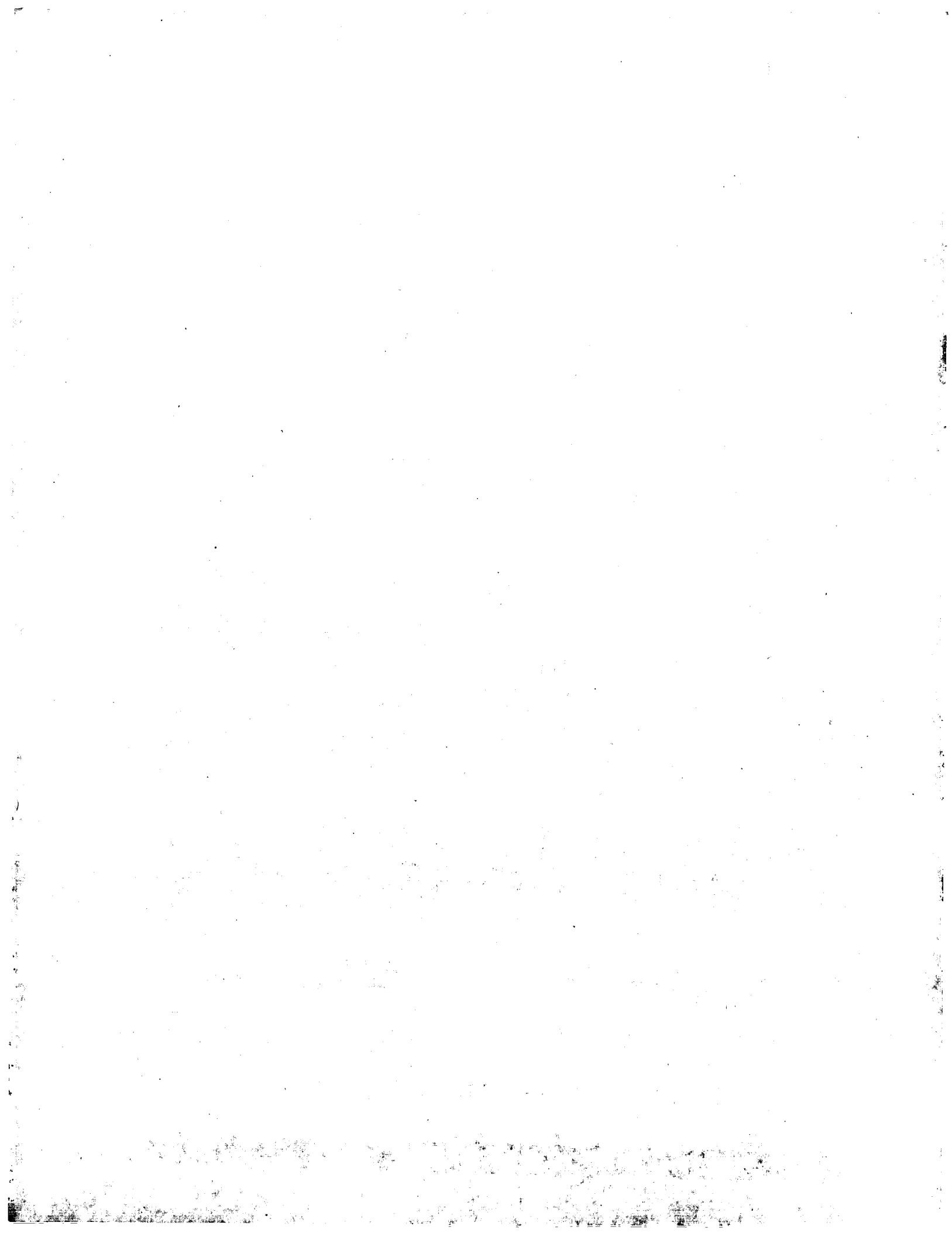
File: USPT

Jul 27, 1993

DOCUMENT-IDENTIFIER: US 5231028 A
TITLE: Immobilized enzyme electrodes

DEPR:

As already indicated, the invention relates particularly to glucose oxidase electrodes, i.e. in which the immobilised enzyme is a glucose oxidase, but it will be apparent that other oxidoreductases can be used, although not always with equivalent effect. This is not necessarily due to any inherent ineffectiveness of the enzyme, but to other factors. For example, in the determination of oxalic acid using oxalate oxidase the oxalic acid substrate itself undergoes electrochemical oxidation at the base electrode, thus largely masking any effect from the enzyme. However, other suitable oxidoreductases include lactate oxidase, galactose oxidase, cholesterol oxidase and other peroxide producing enzymes as well as combinations of immobilised enzymes, including combinations of a non-oxidase and an oxidase, the first acting on a substrate of interest to produce an oxidisable substrate for the oxidase, the latter acting on the oxidisable product to produce a measurable current which is proportional to the concentration of the substrate of interest. One such combination is the combination of beta-galactosidase and glucose oxidase (for the quantitative determination of lactose), or the combination of a beta-glucan depolymerising enzyme, beta-glucosidase and glucose oxidase (for the determination of beta-glucans).



WEST☐ Generate Collection

L17: Entry 4 of 5

File: USPT

Mar 20, 1984

DOCUMENT-IDENTIFIER: US 4438067 A

TITLE: Test strips for analyzing dissolved substances

DEPR:

The presence of catalase in the milk of ruminant is a sign of disease and a simple method for detecting the enzyme helps in detecting such diseases at an early easily curable stage. The reactions involved in the present strip are the following splitting the milk lactose into galactose with galactosidase, oxidizing the galactose in the catalysis presence of galactose oxidase, thus producing hydrogen peroxide, decomposing the H.sub.2 O.sub.2 into water and O.sub.2 by the catalase possibly present and ascertaining the residual H.sub.2 O.sub.2 present by its action on o-tolidine in the presence of peroxidase (same color reaction as in the previous Examples).

WEST

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L5: Entry 38 of 42

File: USPT

Mar 9, 1982

DOCUMENT-IDENTIFIER: US 4318984 A

**** See image for Certificate of Correction ****

TITLE: Stabilized composition, test device, and method for detecting the presence of a sugar in a test sample

Brief Summary Text (23):

The present composition lends itself to a variety of sugar analyses, and can thus be tailored to fill a myriad of needs. Depending on the particular sugar to be assayed, an oxidase is selected which will provide H.sub.2 O.sub.2 as a reaction product upon oxidation of the sugar. The more specific the oxidase is for its sugar substrate, the more specific will be the resultant assay. As stated supra, this enzymatic technology is useful for many sugars, including glucose, fructose, lactose, galactose, maltose, mannose and the pentoses. Thus, an oxidase specific for the sugar, such as galactose oxidase or glucose oxidase, is utilized. These enzymes are known, as are techniques for their isolation.

WEST

Generate Collection

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L5: Entry 15 of 42

File: USPT

Aug 6, 2002

DOCUMENT-IDENTIFIER: US 6428793 B1

TITLE: Lipoglycan compositions and methods of treating parasitic infections

Detailed Description Text (16):

The .beta.-1,4-galactose linkage was confirmed using immobilized ricin lectin. The lipoglycan radiolabeled with galactose oxidase/NaB[.sup.3 H].sub.4 was applied to a column (1.times.2 cm) of Ricinus communis agglutinin-1 (RCA-1). RCA-1 lectin covalently linked to an agarose bead (EY Laboratories, Inc.) equilibrated with PBS, pH 7.4. The loaded column was first washed with PBS and then with 0.2 M lactose. PBS containing 0.1% Triton X-100 was used to flush the column. Fractions (1.2 ml) were collected and measured for radioactivity. The lipoglycan (LG) was retained on the column and released only by the solution containing lactose, confirming the presence of the .beta.-1,4-galactose linkage.

WEST

Generate Collection

Print

L5: Entry 14 of 42

File: USPT

Aug 13, 2002

DOCUMENT-IDENTIFIER: US 6433161 B1

TITLE: Galactosylated hydroxyalkyl polysaccharides

Detailed Description Text (34):

The oxidase-chromogen reagent was prepared by mixing 0.5 ml of galactose oxidase (70 units), 0.5 ml of horseradish peroxidase (100 mg/l), 0.5 ml of o-toluidine (200 mg/l) and 0.5 ml of the substrate solution (the reaction concentration was less than 1.39×10^{-4} M, i.e., 278 μ moles in 2 ml of solution), and then placing the mixture in an incubator at 30.degree. C. for 1 hour. Maximum chromogenesis took place within 60 minutes. The color that developed was read at 420 nm. To calibrate the test, a plot of absorbance at 420 nm versus known amounts of lactose was prepared. Comparison of the test results with the calibration plot gave values for the amount of bound galactose in the test materials.

WEST

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L5: Entry 11 of 42

File: USPT

May 6, 2003

DOCUMENT-IDENTIFIER: US 6558669 B1

TITLE: Stable radioiodine conjugates and methods for their synthesis

Brief Summary Text (12):

The prior art has addressed the issue of residualizing iodine labels by using non-metabolizable sugars to which an iodlatable group is attached. An iodlatable group such as tyramine is reductively coupled to the carbohydrate, so that there is no metabolizable peptide bond between tyramine and the sugar entity. There are two main problems encountered with these prior art methods. These are in the antibody-coupling steps. One method, that of Strobel et al. (see above), uses a carbohydrate-adduct derived from lactose, and couples proteins and antibodies to the same by first oxidizing the galactose portion of such adducts with galactose oxidase. Usually poor overall yield (3-6%) is obtained, as described by Stein et al. Cancer Research, 55: 3132-3139, (1995). Furthermore, lactose is an inefficient substrate for galactose oxidase. In examining a number of galactose-containing carbohydrate derivatives for their ability to be oxidized by this enzyme, Avigad et al. (J. Biol. Chem 237: 2736-2743, (1962)), determined that lactose had less than half the affinity of D-galactose for galactose oxidase, and was oxidized fifty times slower compared to galactose. This inefficient step therefore contributes to overall reduced radioisotope incorporation into antibodies.

Brief Summary Text (30):

The present invention solves the problems of poor labeling efficiency and aggregate formation reported in the carbohydrate-based prior art in two general ways. In the first way, a new method is provided that allows oxidation of the galactose-containing carbohydrate-tyramine (or D-tyrosine) adduct by galactose oxidase. The invention achieves this by using melibiose as the carbohydrate in the adduct. The affinity of melibiose for galactose oxidase is five times as high as that of galactose and ten-times as high compared to the affinity of lactose for galactose oxidase. Furthermore, melibiose is oxidized at a rate comparable to galactose. Consequently, this method of the invention enhances the overall process yield obtained in the oxidation step. Overall incorporations of 18.7-20.7% (see Example-9) have been achieved for the radioiodination of antibody using radioiodinated and oxidized (oxidation using galactose oxidase) dimelibiitoltyramine of the present invention. These incorporations are five-to-ten fold higher than yields observed in the radioiodination of the same antibody, using radioiodinated and oxidized dilactitoltyramine. An advantage of the present invention in this regard lies in utilizing a substrate (dimelibiitoltyramine) which is oxidized readily by galactose oxidase. An additional invention in this context involves the use of hydrazide-appended antibodies which results in enhanced yield in the step of reductive coupling of carbohydrate addend to proteins.

WEST

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L5: Entry 39 of 42

File: USPT

Sep 2, 1980

DOCUMENT-IDENTIFIER: US 4220503 A

TITLE: Stabilization of activated galactose oxidase enzyme

Brief Summary Text (11):

Galactose oxidase (D-galactose: O.sub.2 oxidoreductase, EC 1.1.3.9) is one of the enzymes which it would be desirable to immobilize in an enzyme electrode in view of its ability to ultimately produce hydrogen peroxide from galactose, lactose and a number of other substances. Galactose measurement is important in the preliminary diagnosis of galactosemia and galactose intolerance. Also, research currently being conducted suggests that galactose may be an important alternative energy source in premature infants and that the metabolism of galactose may impart some degree of regulation to blood glucose levels of diabetic infants.

WEST**End of Result Set**☐ **Generate Collection**

L13: Entry 4 of 4

File: USPT

Mar 20, 1984

DOCUMENT-IDENTIFIER: US 4438067 A

TITLE: Test strips for analyzing dissolved substances

DEPR:

The presence of catalase in the milk of ruminant is a sign of disease and a simple method for detecting the enzyme helps in detecting such diseases at an early easily curable stage. The reactions involved in the present strip are the following splitting the milk lactose into galactose with galactosidase, oxidizing the galactose in the catalysis presence of galactose oxidase, thus producing hydrogen peroxide, decomposing the H.sub.2 O.sub.2 into water and O.sub.2 by the catalase possibly present and ascertaining the residual H.sub.2 O.sub.2 present by its action on o-tolidine in the presence of peroxidase (same color reaction as in the previous Examples).

WEST

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L13: Entry 19 of 25

File: USPT

Jul 10, 1984

DOCUMENT-IDENTIFIER: US 4458686 A

TITLE: Cutaneous methods of measuring body substances

DETL:

TABLE

Enzyme Number Source Typical Substrates

Glycollate oxidase 1.1.3.1 spinach glycollate rat liver L-lactate D-lactate
 (+)-mandalate Lactate oxidase 1.1.3.2 M. phlei L-lactate Glucose oxidase
 1.1.3.4 Aspergillus niger .beta.-D-glucose Penicillium amagasakienses
 2-dioxy-D-glucose honey (bee) 6-dioxy-6-fluoro-D-glucose Penicillium notatum
 6-methyl-D-glucose Hexose oxidase 1.1.3.5 .beta.-D-glucose D-galactose
 D-mannose L-Gulonolactone oxidase 1.1.3.8 rat liver L-gulono-.lambda.-lactone
 L-galactonolactone D-manonolactone D-altronolactone Galactose oxidase 1.1.3.9
 Dactylium dendroides D-galactose Polyporus circinatus stachyose lactose
 L-2-Hydroxyacid oxidase 1.1.3.a hog renal cortex L-2-hydroxyacid Aldehyde
 oxidase 1.2.3.1 rabbit liver formaldehyde pig liver acetaldehyde Xanthine
 oxidase 1.2.3.2 bovine milk purine porcine liver hypoxanthine benzaldehyde
 xanthine Pyruvate oxidase 1.2.3.3 pyruvate requires thiamine phosphate Oxalate
 oxidase 1.2.3.4 oxalate Dihydro-orotate-dehydrogenase 1.3.3.1 Zymobacterium
 oroticum L-4, 5-dihydro-orotate NAD D-Aspartate oxidase 1.4.3.1 rabbit kidney
 D-aspartate D-glutamate L-Amino-acid oxidase 1.4.3.2 diamond rattlesnake
 L-methionine cotton mouth moccasin L-phenylalanine rat kidney 2-hydroxy acids
 L-lactate D-Amino acid oxidase 1.4.3.3 hog kidney D-alanine D-valine D-proline
 Monoamine oxidase 1.4.3.4 beef plasma monoamine placenta benzylamine
 octylamine Pyridoxamine phosphate oxidase 1.4.3.5 rabbit liver pyridoxamine
 phosphate Diamine oxidase 1.4.3.6 bovine plasma diamines pea seedlings
 spermidine procine plasma tyramine Sarcosine oxidase 1.5.3.1 Macaca mulatta
 sarcosine rat liver mitochondria N--Methyl-L-amino acid oxidase 1.5.3.2
 N--methyl-L-amino acids Spermine oxidase 1.5.3.3 Neisseria perflava spermine
 Serratia marcescens spermidine Nitroethane oxidase 1.7.3.1 nitroethane
 aliphatic nitro compounds Urate oxidase 1.7.3.3 hog liver urate ox kidney
 Sulfite oxidase 1.8.3.1 beef liver sulfite Alcohol oxidase Basidiomycetes
 ethanol and methanol Carbohydrate oxidase Basidiomycetes D-glucose Polyporus
 obtusus D-glucopyranose D-xylopyranose 1-sorbose .delta.-D-gluconolactone NADH
 oxidase beef heart NADH mitochondria Malate oxidase 1.1.3.2 L-malate
 Cholesterol oxidase 1.1.3.6 cholesterol N--Acetylmoxyl oxidase 1.7.3.2
 N--acetylmoxyl Thiol oxidase 1.8.3.2 R: CR-SH Ascorbate oxidase 1.10.3.3
 squash L-ascorbate

WEST☐ Generate Collection

L13: Entry 21 of 25

File: USPT

Mar 9, 1982

DOCUMENT-IDENTIFIER: US 4318984 A

TITLE: Stabilized composition, test device, and method for detecting the presence of a sugar in a test sample

BSPR:

The present composition lends itself to a variety of sugar analyses, and can thus be tailored to fill a myriad of needs. Depending on the particular sugar to be assayed, an oxidase is selected which will provide H.sub.2 O.sub.2 as a reaction product upon oxidation of the sugar. The more specific the oxidase is for its sugar substrate, the more specific will be the resultant assay. As stated supra, this enzymatic technology is useful for many sugars, including glucose, fructose, lactose, galactose, maltose, mannose and the pentoses. Thus, an oxidase specific for the sugar, such as galactose oxidase or glucose oxidase, is utilized. These enzymes are known, as are techniques for their isolation.

WEST☐ Generate Collection

L13: Entry 24 of 25

File: USPT

Dec 16, 1975

DOCUMENT-IDENTIFIER: US 3926732 A

TITLE: Method for assaying catalase in milk and other liquids

BSPR:

The most favorable approach, however, is to mix the milk or other liquids of biological origin with an enzyme of synergistic enzymes capable of releasing hydrogen peroxide in the presence of a sugar available in the liquid. Such generation of hydrogen peroxide can be obtained from the lactose in the milk in conjunction with the enzyme galactose oxidase.

BSPR:

However, galactose oxidase is basically specific to free galactose and reacts only slowly with lactose. It is therefore to advantage to add the enzyme .beta.-galactoxidase, which splits lactose into galactose and glucose. Instead of galactose oxidase, or in conjunction with that enzyme, the enzyme glucose oxidase, which is specific to the glucose obtained by the splitting reaction, can be used together with .beta.-galactoxidase.

BSPR:

A test cell is fitted with two compartments, one of which is permanently closed by a semipermeable membrane and contains 1 - 10 u of galactose oxidase (as counted on lactose as the substrate). A small amount, 0.5 - 1 ml, of the liquid to be analyzed for catalase is added in the open compartment of the test cell. A test paper, containing peroxidase and a leuco dye as described in Example 2 (below), is arranged in the liquid in such a way that its nearest part remains at a fixed distance of a few mm from the semipermeable membrane. Various sensitivities to catalase can be attained, depending on the amount of galactose oxidase, the sample volume, and the fixed distance mentioned. With an arrangement as described, it has been possible to carry out semi-quantitative determinations of catalase concentrations of approximately 2 - 20 U/ml by observing the development of color in the test paper, which is maximum after a few minutes in the absence of catalase but attains gradually weaker intensity the higher the catalase concentration.

BSTL:

Solution 1 Peroxidase (EC 1.11.1.7, RZ 0.6) 0.5 mg/ml o-tolidine 0.5 mg/ml buffer salt yielding an almost neutral pH, such as phosphate Solution 2 Galactose oxidase (EC 1.1.3.9, about 20 U/mg, with lactose as substrate, non-catalase) 0.5 - 5 mg/ml buffer salt as above

WEST☐ **Generate Collection**

L13: Entry 23 of 25

File: USPT

Sep 13, 1977

DOCUMENT-IDENTIFIER: US 4048018 A

TITLE: Method of carrying out enzyme catalyzed reactions

DEPR:

Other important applications of fluidized beds of immobilized enzymes are: the use of immobilized .alpha.-galactosidase or melibiase (which can be obtained from the fungus *Mortierella vinaceae*) for hydrolyzing sugar raffinose in beet sugar molasses (this raffinose forms in beets during cold weather and retards the rate of sucrose precipitation from the beet sugar molasses); the use of the immobilized enzyme aminoacylase to selectively hydrolyze acyl-L-amino acid within a mixture of acyl-DL-amino acid thereby facilitating the downstream separation of the L-amino acid from the mixture according to the process disclosed by Chibata et al. in U.S. Pat. No. 3,386,888; the use of immobilized aspartase to catalyze the addition of ammonia to fumaric acid thereby producing L-aspartic acid; the use of immobilized penicillin amidase to hydrolyze penicillin to 6-aminopenicillanic acid, a precursor of various important penicillin derivatives; the use of immobilized glucose oxidase and catalase (preferably within the same reactor or even immobilized together on the same fluidizable particles) to produce gluconic acid by the oxidation of glucose using oxygen; the use of immobilized sulfhydryl oxidase to catalyze the oxidation of sulfhydryl groups in milk by oxygen thereby improving the temperature stability of the milk; the use of immobilized pectinases for clarifying fruit juices and alcoholic beverages; the use of immobilized invertase to hydrolyze sucrose to invert sugar; the use of immobilized isoamylase and .alpha.-amylase to hydrolyze starch and starch dextrins to maltose; the use of immobilized galactose oxidase to oxidize galactose to galactonic acid; the use of immobilized galactose oxidase and lactase (preferably within the same reactor or even immobilized on the same fluidizable particle) to convert lactose in milk, milk products, and cheese whey to a mixture of glucose and galactonic acid; the use of immobilized .beta.-glucanases to reduce beer viscosity; the use of immobilized polyphenol oxidase to oxidize polyphenols in beer wort; the use of immobilized papain in the chill-proofing of beer.

WEST

Generate Collection

L17: Entry 3 of 5

File: USPT

Nov 13, 1990

DOCUMENT-IDENTIFIER: US 4970145 A
TITLE: Immobilized enzyme electrodes

DEPR:

As already indicated, the invention relates particularly to glucose oxidase electrodes, i.e. in which the immobilised enzyme is a glucose oxidase, but it will be apparent that other oxidoreductases can be used, although not always with equivalent effect. This is not necessarily due to any inherent ineffectiveness of the enzyme, but to other factors. For example, in the determination of oxalic acid using oxalate oxidase the oxalic acid substrate itself undergoes electrochemical oxidation at the base electrode, thus largely masking any effect from the enzyme. However, other suitable oxidoreductases include lactate oxidase, galactose oxidase, cholesterol oxidase and other peroxide producing enzymes as well as combinations of immobilised enzymes, including combinations of a nonoxidase and an oxidase, the first acting on a substrate of interest to produce an oxidisable substrate for the oxidase, the latter acting on the oxidisable product to produce a measurable current which is proportional to the concentration of the substrate of interest. One such combination is the combination of beta-galactosidase and glucose oxidase (for the quantitative determination of lactose), or the combination of a beta-glucan depolymerising enzyme, beta-glucosidase and glucose oxidase (for the determination of beta-glucans).

WEST**End of Result Set**

Generate Collection

L19: Entry 4 of 4

File: USPT

Mar 20, 1984

DOCUMENT-IDENTIFIER: US 4438067 A

TITLE: Test strips for analyzing dissolved substances

DEPR:

The presence of catalase in the milk of ruminant is a sign of disease and a simple method for detecting the enzyme helps in detecting such diseases at an early easily curable stage. The reactions involved in the present strip are the following splitting the milk lactose into galactose with galactosidase, oxidizing the galactose in the catalysis presence of galactose oxidase, thus producing hydrogen peroxide, decomposing the H.sub.2 O.sub.2 into water and O.sub.2 by the catalase possibly present and ascertaining the residual H.sub.2 O.sub.2 present by its action on o-tolidine in the presence of peroxidase (same color reaction as in the previous Examples).

WEST

Generate Collection

L18: Entry 11 of 13

File: USPT

Sep 2, 1980

DOCUMENT-IDENTIFIER: US 4220503 A

TITLE: Stabilization of activated galactose oxidase enzyme

BSPR:

Galactose oxidase (D-galactose: O.sub.2 oxidoreductase, EC 1.1.3.9) is one of the enzymes which it would be desirable to immobilize in an enzyme electrode in view of its ability to ultimately produce hydrogen peroxide from galactose, lactose and a number of other substances. Galactose measurement is important in the preliminary diagnosis of galactosemia and galactose intolerance. Also, research currently being conducted suggests that galactose may be an important alternative energy source in premature infants and that the metabolism of galactose may impart some degree of regulation to blood glucose levels of diabetic infants.

WEST

Generate Collection

L18: Entry 10 of 13

File: USPT

Mar 20, 1984

DOCUMENT-IDENTIFIER: US 4438067 A

TITLE: Test strips for analyzing dissolved substances

DEPR:

The presence of catalase in the milk of ruminant is a sign of disease and a simple method for detecting the enzyme helps in detecting such diseases at an early easily curable stage. The reactions involved in the present strip are the following splitting the milk lactose into galactose with galactosidase, oxidizing the galactose in the catalysis presence of galactose oxidase, thus producing hydrogen peroxide, decomposing the H.sub.2 O.sub.2 into water and O.sub.2 by the catalase possibly present and ascertaining the residual H.sub.2 O.sub.2 present by its action on o-tolidine in the presence of peroxidase (same color reaction as in the previous Examples).

WEST☐ Generate Collection

L18: Entry 12 of 13

File: USPT

Dec 16, 1975

DOCUMENT-IDENTIFIER: US 3926732 A

TITLE: Method for assaying catalase in milk and other liquids

BSPR:

The most favorable approach, however, is to mix the milk or other liquids of biological origin with an enzyme of synergistic enzymes capable of releasing hydrogen peroxide in the presence of a sugar available in the liquid. Such generation of hydrogen peroxide can be obtained from the lactose in the milk in conjunction with the enzyme galactose oxidase.

WEST**End of Result Set**

Generate Collection

L11: Entry 1 of 1

File: DWPI

May 17, 2000

DERWENT-ACC-NO: 1999-131751

DERWENT-WEEK: 200028

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TITLE: A dough and bread improving composition comprising a galactose oxidase and a substrate for it - useful for improving the rheological characteristics of flour dough with a dough strengthening effect, without stickiness and/or slackness

INVENTOR: ROUAU, X; SCHRODER, M ; SOE, J B

PATENT-ASSIGNEE:

ASSIGNEE

DANISCO AS

CODE

DANIN

PRIORITY-DATA:

1997US-0053451

July 22, 1997

1997DK-0000878

July 18, 1997

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
EP 999752 A1	May 17, 2000	E	000	A21D008/04
WO 9903351 A1	January 28, 1999	E	041	A21D008/04
AU 9883347 A	February 10, 1999	N/A	000	A21D008/04

DESIGNATED-STATES: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE AL
AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID
IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO
RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW AT BE CH CY DE DK EA ES
FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-NO
EP 999752A1	July 16, 1998	1998EP-0933577	N/A
EP 999752A1	July 16, 1998	1998WO-DK00335	N/A
EP 999752A1	N/A	WO 9903351	Based on
WO 9903351A1	July 16, 1998	1998WO-DK00335	N/A
AU 9883347A	July 16, 1998	1998AU-0083347	N/A
AU 9883347A	N/A	WO 9903351	Based on

INT-CL (IPC): A21D 8/04; A23L 1/16

ABSTRACTED-PUB-NO: WO 9903351A
BASIC-ABSTRACT:

A dough and bread improving composition comprises (a) an enzyme having galactose oxidase activity, and (b) an oxidisable substrate for (a) and/or an enzyme which can convert a compound into this substrate. Also claimed is a method of preparing a flour dough.

USE - The composition is useful for improving the rheological characteristics of flour dough with a dough strengthening effect, without stickiness and/or slackness

ADVANTAGE - Any type of flour dough can be used, e.g. wheat flour based bread products, noodle products, alimentary paste product, etc.

CHOSEN-DRAWING: Dwg.0/4

TITLE-TERMS: DOUGH BREAD IMPROVE COMPOSITION COMPRISE GALACTOSE OXIDASE
SUBSTRATE USEFUL IMPROVE RHEOLOGICAL CHARACTERISTIC FLOUR DOUGH DOUGH STRENGTH
EFFECT STICKY SLACK

DERWENT-CLASS: D11 D16

CPI-CODES: D01-B01; D01-B02A; D05-A02A;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1999-038439

WEST**End of Result Set**☐ **Generate Collection** **Print**

L7: Entry 11 of 11

File: DWPI

May 29, 1974

DERWENT-ACC-NO: 1974-47183V

DERWENT-WEEK: 197426

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TITLE: Catalase determination in biological fluids, pref milk - by use of a substance which forms hydrogen peroxide in the presence of the fluid, esp for diagnosis of mastitis

PATENT-ASSIGNEE:

ASSIGNEE

CODE

ALFA LAVAL AB

ALFA

ALFA LAVAL SPA

ALFA

PRIORITY-DATA: 1973SE-0010077 (July 19, 1973), 1973SE-0002201 (February 16, 1973)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
BE 810903 A	May 29, 1974		000	
AT 7401204 A	March 15, 1978		000	
CA 1013656 A	July 12, 1977		000	
CH 591696 A	September 30, 1977		000	
DD 109951 A	November 20, 1974		000	
DE 2407046 A	September 5, 1974		000	
DE 2407046 B	June 23, 1977		000	
FI 7400426 A	October 31, 1974		000	
FR 2218566 A	October 18, 1974		000	
GB 1445793 A	August 11, 1976		000	
IL 44125 A	April 29, 1977		000	
IT 1027519 B	December 20, 1978		000	
JP 50025293 A	March 17, 1975		000	
NL 7402118 A	August 20, 1974		000	
SE 7302201 A	August 19, 1974		000	
SE 7310077 A	February 17, 1975		000	
SU 622423 A	August 16, 1978		000	
US 3926732 A	December 16, 1975		000	
ZA 7400849 A	August 8, 1975		000	

A INT-CL (IPC): C12D 13/10; G01M 0/00; G01N 31/22; G01N 33/16

ABSTRACTED-PUB-NO: BE 810903A

BASIC-ABSTRACT:

Catalase in milk or other liq. (pref. biological) is qualitatively or quantitatively determined by addn. of a reagent contg. a substance, or synergistic mixt. of substancesa, which form H2O2 in the presence of a substance contd. in the liq. being

analysed, and another reagent which gives a coloured reaction on oxidn. with H₂O₂, the catalase content being determined by the depth of colour obtd. The reagent which forms H₂O₂ may be an enzyme or synergistic mixt of enzymes, e.g. galactose-oxidase, which forms H₂O₂ in the presence of a sugar in the fluid; a substance, e.g. xanthine, which forms H₂O₂ in the presence of an enzyme in the fluid, e.g. xanthine-oxidase; or an org. or mineral peroxide or a substance which will form a peroxide. The reagent giving a coloured reaction is pref. the lenco-deriv. of a dye, e.g. o-tolidine.

TITLE-TERMS: CATALASE DETERMINE BIOLOGICAL FLUID PREFER MILK SUBSTANCE FORM HYDROGEN PEROXIDE PRESENCE FLUID DIAGNOSE MASTITIS

DERWENT-CLASS: B04 C03 D13 S02 S03 S05

CPI-CODES: B04-A05; B04-A06; B04-B02C; B04-B04D; B04-B04K; B05-C08; B10-A04; B10-B01A; B12-K04; C04-A06; C04-B02C; C04-B04D; C04-B04K; C05-C08; C10-A04; C10-B01A; C12-K04; D03-B; D03-K03;

CHEMICAL-CODES:

Chemical Indexing M1 *01*

Fragmentation Code

V800 V600 V610 V631 N100 M430 M740 M750 P831 P832
R002 M423 M902

Chemical Indexing M1 *02*

Fragmentation Code

V460 D932 J522 N100 M430 M511 M520 M530 M540 M740
M750 P831 P832 M782 R002 M412 M902

Chemical Indexing M1 *03*

Fragmentation Code

V460 D932 J522 N100 M430 M511 M520 M530 M540 M740
M750 P831 P832 M782 R002 R000 M412 M902

Chemical Indexing M1 *04*

Fragmentation Code

V800 V600 V610 V631 N100 M430 M740 M750 P831 P832
R002 R000 M423 M902

Chemical Indexing M2 *05*

Fragmentation Code

H1 M121 M111 M282 M210 M211 M231 M240 M311 M320
G100 M532 H142 H143 N100 M430 M510 M520 M540 M740
M750 P831 P832 M782 R002 R000 M414 M902

Chemical Indexing M2 *06*

Fragmentation Code

K0 M320 M280 L431 L432 M620 N100 M430 M510 M520
M530 M540 M740 M750 P831 P832 M782 R002 R000 M416
M902

Chemical Indexing M2 *07*

Fragmentation Code

A111 A940 A980 C800 C730 C101 C108 C408 C803 C802
C807 C805 C804 B720 C801 C550 B803 B831 B105 B713
N100 M430 M740 M750 P831 P832 M782 R002 R000 M411
M902

Chemical Indexing M2 *08*

Fragmentation Code

J5 M320 M280 D932 J522 N100 M430 M511 M520 M530
M540 M740 M750 P831 P832 M782 R002 R000 M412 M902

Chemical Indexing M2 *09*

WEST☐

L7: Entry 9 of 11

File: USPT

Dec 16, 1975

DOCUMENT-IDENTIFIER: US 3926732 A

**** See image for Certificate of Correction ****

TITLE: Method for assaying catalase in milk and other liquids

Brief Summary Text (16):

The most favorable approach, however, is to mix the milk or other liquids of biological origin with an enzyme of synergistic enzymes capable of releasing hydrogen peroxide in the presence of a sugar available in the liquid. Such generation of hydrogen peroxide can be obtained from the lactose in the milk in conjunction with the enzyme galactose oxidase.

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L5: Entry 41 of 42

File: USPT

Dec 16, 1975

DOCUMENT-IDENTIFIER: US 3926732 A

**** See image for Certificate of Correction ****

TITLE: Method for assaying catalase in milk and other liquids

Brief Summary Text (16):

The most favorable approach, however, is to mix the milk or other liquids of biological origin with an enzyme of synergistic enzymes capable of releasing hydrogen peroxide in the presence of a sugar available in the liquid. Such generation of hydrogen peroxide can be obtained from the lactose in the milk in conjunction with the enzyme galactose oxidase.

Brief Summary Text (17):

However, galactose oxidase is basically specific to free galactose and reacts only slowly with lactose. It is therefore to advantage to add the enzyme .beta.-galactoxidase, which splits lactose into galactose and glucose. Instead of galactose oxidase, or in conjunction with that enzyme, the enzyme glucose oxidase, which is specific to the glucose obtained by the splitting reaction, can be used together with .beta.-galactoxidase.

Brief Summary Text (31):

A test cell is fitted with two compartments, one of which is permanently closed by a semipermeable membrane and contains 1 - 10 u of galactose oxidase (as counted on lactose as the substrate). A small amount, 0.5 - 1 ml, of the liquid to be analyzed for catalase is added in the open compartment of the test cell. A test paper, containing peroxidase and a leuco dye as described in Example 2 (below), is arranged in the liquid in such a way that its nearest part remains at a fixed distance of a few mm from the semipermeable membrane. Various sensitivities to catalase can be attained, depending on the amount of galactose oxidase, the sample volume, and the fixed distance mentioned. With an arrangement as described, it has been possible to carry out semi-quantitative determinations of catalase concentrations of approximately 2 - 20 U/ml by observing the development of color in the test paper, which is maximum after a few minutes in the absence of catalase but attains gradually weaker intensity the higher the catalase concentration.

Brief Summary Paragraph Table (2):

Solution 1 Peroxidase (EC 1.11.1.7, RZ 0.6) 0.5 mg/ml o-tolidine 0.5 mg/ml buffer salt yielding an almost neutral pH, such as phosphate Solution 2 Galactose oxidase (EC 1.1.3.9, about 20 U/mg, with lactose as substrate, non-catalase) 0.5 - 5 mg/ml buffer salt as above

WEST**Freeform Search**

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EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Term:

11 or

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Today's Date: 11/16/2000

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT,JPAB,EPAB,DWPI,TDBD	lactose same l12	4	<u>L13</u>
USPT,JPAB,EPAB,DWPI,TDBD	l3 same l11	105	<u>L12</u>
USPT,JPAB,EPAB,DWPI,TDBD	l1 same l10 same l8	222	<u>L11</u>
USPT,JPAB,EPAB,DWPI,TDBD	lactose or galactose or galactan	68794	<u>L10</u>
USPT,JPAB,EPAB,DWPI,TDBD	l8 same l1 same l2	5	<u>L9</u>
USPT,JPAB,EPAB,DWPI,TDBD	hemicellulase or pentosanase or xylanase or arabinofuranosidase or mannanase or galactanase or galactosidase	13576	<u>L8</u>
USPT,JPAB,EPAB,DWPI,TDBD	l1 same l2	25	<u>L7</u>
USPT,JPAB,EPAB,DWPI,TDBD	(l1 same l2 same l4) and l3	0	<u>L6</u>
USPT,JPAB,EPAB,DWPI,TDBD	l1 same l2 same l3 same l4	0	<u>L5</u>
USPT,JPAB,EPAB,DWPI,TDBD	cellulase	6306	<u>L4</u>
USPT,JPAB,EPAB,DWPI,TDBD	(leavening agent) or emulsifier or (preserving agent) or (oxidizing agent) or iodate or peroxide or (ascorbic acid) or k-bromate or azodicarbonamide	285495	<u>L3</u>
USPT,JPAB,EPAB,DWPI,TDBD	lactose	59827	<u>L2</u>
USPT,JPAB,EPAB,DWPI,TDBD	galactose oxidase	784	<u>L1</u>

WEST**Freeform Search****Database:**

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JPO Abstracts Database
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Term:

113 same 12 same 13

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20

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Search History**Today's Date:** 11/16/2000

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT,JPAB,EPAB,DWPI,TDBD	113 same l2 same l3	4	<u>L21</u>
USPT,JPAB,EPAB,DWPI,TDBD	113 same l2	13	<u>L20</u>
USPT,JPAB,EPAB,DWPI,TDBD	118 and l17	4	<u>L19</u>
USPT,JPAB,EPAB,DWPI,TDBD	113 same l2	13	<u>L18</u>
USPT,JPAB,EPAB,DWPI,TDBD	113 same l3	5	<u>L17</u>
USPT,JPAB,EPAB,DWPI,TDBD	19 same l15	1	<u>L16</u>
USPT,JPAB,EPAB,DWPI,TDBD	14 same l1	785	<u>L15</u>
USPT,JPAB,EPAB,DWPI,TDBD	113 and l9	0	<u>L14</u>
USPT,JPAB,EPAB,DWPI,TDBD	(galactose oxidase) same lactose	25	<u>L13</u>
USPT,JPAB,EPAB,DWPI,TDBD	11 same l4	785	<u>L12</u>
USPT,JPAB,EPAB,DWPI,TDBD	11 same l4 same l9	1	<u>L11</u>
USPT,JPAB,EPAB,DWPI,TDBD	19 and l5	0	<u>L10</u>
USPT,JPAB,EPAB,DWPI,TDBD	dough or l6	29807	<u>L9</u>
USPT,JPAB,EPAB,DWPI,TDBD	15 and lactose	44	<u>L8</u>
USPT,JPAB,EPAB,DWPI,TDBD	15 and l6	0	<u>L7</u>
USPT,JPAB,EPAB,DWPI,TDBD	(cereal flour) or pentosan or xylan or (noodle dough) or (alimentary paste dough)	4039	<u>L6</u>
USPT,JPAB,EPAB,DWPI,TDBD	11 same l2 same l3 same l4	105	<u>L5</u>
USPT,JPAB,EPAB,DWPI,TDBD	lactose or galactose or galactan	68794	<u>L4</u>
USPT,JPAB,EPAB,DWPI,TDBD	hemicellulase or pentosanase or xylanase or arabinofuranosidase or mannanase or galactanase or galactosidase	13576	<u>L3</u>
USPT,JPAB,EPAB,DWPI,TDBD	(leavening agent) or emulsifier or (preserving agent) or (oxidizing agent) or iodate or peroxide or (ascorbic acid) or k-bromate or azodicarbonamide	285495	<u>L2</u>
USPT,JPAB,EPAB,DWPI,TDBD	(galactose oxidase) or (hexose oxidase) or (l-sorbose oxidase)	835	<u>L1</u>

Trying 3106016892...Open

Welcome to STN International! Enter x:x

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Substances (PICCS) has been added to CHEMLIST
NEWS 9 Oct 27 New Extraction Code PAX now available in Derwent
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=> index bioscience, chemistry

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
FILE 'PAPERCHEM' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS

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SINCE FILE	TOTAL
ENTRY	SESSION
0.30	0.30

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI,

BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, ECHDS, BIOTECHNO,
CABA,
CANCERLIT, CAPLUS, CEABA, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU,
DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 16:11:51 ON 16
NOV 2000

80 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> s (galactose oxidase?) or (hexose oxidase?) or (l-sorbose oxidase?)

61 FILE AGRICOLA
4 FILE AIDSLINE
40 FILE ANABSTR
5 FILE AQUASCI
17 FILE BIOBUSINESS
3 FILE BIOCOMMERCE
1036 FILE BIOSIS
116 FILE BIOTECHABS
116 FILE BIOTECHDS
244 FILE BIOTECHNO
94 FILE CABA
293 FILE CANCERLIT
1337 FILE CAPLUS
22 FILE CEABA
1 FILE CEN
1 FILE CIN
39 FILE CONFSCI

21 FILES SEARCHED...

22 FILE DDFB
7 FILE DDFU
63 FILE DGENE
22 FILE DRUGB
17 FILE DRUGU
3 FILE EMBAL
690 FILE EMBASE
89 FILE ESBIODASE
28 FILE FROSTI
27 FILE FSTA
27 FILE GENBANK
1 FILE HEALSAFE
105 FILE IFIPAT
135 FILE JICST-EPLUS
2 FILE KOSMET
210 FILE LIFESCI

42 FILES SEARCHED...

837 FILE MEDLINE
4 FILE NIOSHTIC
5 FILE NTIS
2 FILE PHIN
6 FILE PROMT
549 FILE SCISEARCH
60 FILE TOXLINE
74 FILE TOXLIT
701 FILE USPATFULL
102 FILE WPIDS
102 FILE WPINDEX
53 FILE BABS
21 FILE CAOLD
1 FILE CBNB

63 FILES SEARCHED...

22 FILE COMPENDEX
1 FILE DKILIT
16 FILE INSPEC

5 FILE IN YS
1 FILE INVESTEXT
69 FILES SEARCHED...
6 FILE PAPERCHEM2
3 FILE RAPRA
1 FILE VTB

55 FILES HAVE ONE OR MORE ANSWERS, 80 FILES SEARCHED IN STNINDEX

L1 QUE (GALACTOSE OXIDASE?) OR (HEXOSE OXIDASE?) OR (L-SORBOSE OXIDASE?)

=> s lactose? or galactose? or galactan?

159 FILE ADISALERTS
22 FILE ADISINSIGHT
5661 FILE AGRICOLA
124 FILE AIDSLINE
924 FILE ANABSTR
777 FILE AQUASCI
3487 FILE BIOBUSINESS
122 FILE BIOCOMMERCE
36924 FILE BIOSIS
4871 FILE BIOTECHABS
4871 FILE BIOTECHDS
8789 FILE BIOTECHNO
21417 FILE CABA
3135 FILE CANCERLIT
62598 FILE CAPLUS
1520 FILE CEABA
43 FILE CEN
146 FILE CIN
548 FILE CONFSCI
62 FILE CROPB
165 FILE CROPU
1936 FILE DDFB
3346 FILE DDFU
1154 FILE DGENE
1936 FILE DRUGB
872 FILE DRUGLAUNCH
319 FILE DRUGMONOG2
9 FILE DRUGNL
4379 FILE DRUGU
167 FILE EMBAL
24261 FILE EMBASE
5006 FILE ESBIODBASE
111 FILE FOMAD
243 FILE FOREGE
5211 FILE FROSTI
9884 FILE FSTA
1125 FILE GENBANK
37 FILES SEARCHED...

52 FILE HEALSAFE
3716 FILE IFIPAT
2723 FILE JICST-EPLUS
19 FILE KOSMET
8108 FILE LIFESCI
3 FILE MEDICONF
33318 FILE MEDLINE
137 FILE NIOSHTIC
423 FILE NTIS
269 FILE OCEAN
19 FILE PHAR
3 FILE PHIC
121 FILE PHIN
2541 FILE PROMT

20926 FILE SCARCH
 5778 FILE TOXLINE
 12087 FILE TOXLIT
 58448 FILE USPATFULL
 8309 FILE WPIDS
 8309 FILE WPINDEX
 2 FILE ALUMINIUM
 21 FILE APILIT
 21 FILE APILIT2
 2129 FILE BABS
 2547 FILE CAOLD
 115 FILE CBNB
 1 FILE CERAB
 1288 FILE COMPENDEX
 111 FILE DKILIT
 232 FILE INSPEC
 108 FILE INSPHYS
 344 FILE INVESTEXT
 1231 FILE IPA
 10 FILE METADEX
 275 FILE NAPRALERT
 1171 FILE PAPERCHEM2
 68 FILE RAPRA
 26 FILE RUSSCI
 55 FILE TULSA
 46 FILE TULSA2
 6 FILE USAN
 174 FILE VTB
 44 FILE WSCA

80 FILES HAVE ONE OR MORE ANSWERS, 80 FILES SEARCHED IN STNINDEX

L2 QUE LACTOSE? OR GALACTOSE? OR GALACTAN?

=> dough? or (cereal flour?) or pentosan? or xylan? or (noodle dough?) or (alimentary dough?)

DOUGH? IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter

"HELP COMMANDS" at an arrow prompt (=>).

=> s dough? or (cereal flour?) or pentosan? or xylan? or (noodle dough?) or (alimentary dough?)

85 FILE ADISALERTS
 2 FILE ADISINSIGHT
 4516 FILE AGRICOLA
 89 FILE AIDSLINE
 131 FILE ANABSTR
 193 FILE AQUASCI
 4169 FILE BIOBUSINESS
 102 FILE BIOCOMMERCE
 9767 FILE BIOSIS
 2646 FILE BIOTECHABS
 2646 FILE BIOTECHDS
 2104 FILE BIOTECHNO
 5524 FILE CABA
 241 FILE CANCERLIT
 15996 FILE CAPLUS
 1252 FILE CEABA
 57 FILE CEN
 240 FILE CIN
 18 FILES SEARCHED...
 337 FILE CONFSCI
 23 FILE CROPB

213 FILE CR
 144 FILE DDF
 526 FILE DDFU
 1720 FILE DGENE
 144 FILE DRUGB
 15 FILE DRUGLAUNCH
 177 FILE DRUGMONOG2
 4 FILE DRUGNL
 564 FILE DRUGU
 39 FILE EMBAL
 3343 FILE EMBASE
 1701 FILE ESBIOBASE
 469 FILE FOMAD
 317 FILE FOREGE
 8444 FILE FROSTI
 13288 FILE FSTA
 36 FILES SEARCHED...
 823 FILE GENBANK
 28 FILE HEALSAFE
 5101 FILE IFIPAT
 3422 FILE JICST-EPLUS
 4 FILE KOSMET
 2301 FILE LIFESCI
 2608 FILE MEDLINE
 55 FILE NIOSHTIC
 334 FILE NTIS
 75 FILE OCEAN
 4 FILE PHAR
 1 FILE PHIC
 120 FILE PHIN
 13135 FILE PROMT
 7377 FILE SCISEARCH
 774 FILE TOXLINE
 1226 FILE TOXLIT
 16975 FILE USPATFULL
 14724 FILE WPIDS
 56 FILES SEARCHED...
 14724 FILE WPINDEX
 22 FILE ALUMINIUM
 87 FILE APILIT
 87 FILE APILIT2
 258 FILE BABS
 1453 FILE CAOLD
 140 FILE CBNB
 4 FILE CERAB
 1387 FILE COMPENDEX
 182 FILE DKILIT
 468 FILE INSPEC
 45 FILE INSPHYS
 5897 FILE INVESTEXT
 35 FILE IPA
 43 FILE METADEX
 52 FILE NAPRALERT
 3364 FILE PAPERCHEM2
 748 FILE RAPRA
 18 FILE RUSSCI
 44 FILE TULSA
 10 FILE TULSA2
 1 FILE USAN
 78 FILES SEARCHED...
 42 FILE VTB
 43 FILE WSCA

79 FILES HAVE ONE OR MORE ANSWERS, 80 FILES SEARCHED IN STNINDEX

L3 QUE DOUGH? OR (CEREAL FLOUR?) OR PENTOSAN? OR XYLAN? OR (NOODLE DOUGH?)
 OR

(ALIMENTARY...GH?)

=> s 11 (p) 12 (p) 13

```
1 FILE AGRICOLA
1 FILE BIOBUSINESS
0* FILE BIOCOMMERCE
1 FILE BIOSIS
0* FILE BIOTECHABS
0* FILE BIOTECHDS
0* FILE BIOTECHNO
2 FILE CAPLUS
0* FILE CEABA
0* FILE CIN
21 FILES SEARCHED...
1* FILE ESBIODASE
0* FILE FOMAD
0* FILE FOREGE
3* FILE FROSTI
1* FILE FSTA
0* FILE KOSMET
42 FILES SEARCHED...
0* FILE MEDICONE
0* FILE NTIS
1 FILE SCISEARCH
5 FILE USPATFULL
2 FILE WPIDS
2 FILE WPINDEX
0* FILE ALUMINIUM
0* FILE APILIT
0* FILE APILIT2
0* FILE BABS
0* FILE CAOLD
0* FILE CBNB
63 FILES SEARCHED...
0* FILE COMPENDEX
0* FILE DKILIT
0* FILE INSPEC
0* FILE INSPHYS
0* FILE METADEX
0* FILE RAPRA
0* FILE RUSSCI
0* FILE VTB
0* FILE WSCA
```

11 FILES HAVE ONE OR MORE ANSWERS, 80 FILES SEARCHED IN STNINDEX

L4 QUE L1 (P) L2 (P) L3

=> d rank

```
F1 5 USPATFULL
F2 3* FROSTI
F3 2 CAPLUS
F4 2 WPIDS
F5 2 WPINDEX
F6 1 AGRICOLA
F7 1 BIOBUSINESS
F8 1 BIOSIS
F9 1 SCISEARCH
F10 1* ESBIODASE
F11 1* FSTA
```

=> file f1-f11

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY

SESSION

5.40

5.70

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=> s 14

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L1 (P) L2'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L2 (P) L3'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L1 (P) L2'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L2 (P) L3'

9 FILES SEARCHED...

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L1 (P) L2'
PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'L2 (P) L3'
L5 18 L4

=> dup rem 15

PROCESSING COMPLETED FOR L5
L6 14 DUP REM L5 (4 DUPLICATES REMOVED)

=> d 1-14 ab,bib

L6 ANSWER 1 OF 14 USPATFULL

AB The present invention relates to isolated polypeptides having galactose oxidase activity and isolated nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs,

vectors, and h cells comprising the nucleic d sequences as well
as methods for producing and using the polypeptides.
AN 2000:91759 USPATFULL
TI Polypeptides having galactose oxidase activity and nucleic acids
encoding same
IN Golightly, Elizabeth, Davis, CA, United States
Berka, Randy M., Davis, CA, United States
Rey, Michael W., Davis, CA, United States
PA Novo Nordisk Biotech, Inc., Davis, CA, United States (U.S. corporation)
PI US 6090604 20000718
AI US 1999-257536 19990224 (9)
DT Utility
EXNAM Primary Examiner: Prouty, Rebecca E.; Assistant Examiner: Monshipouri,
M.
LREP Zelson, Esq., Steve; Lambris, Esq., Elias; Stames, Robert L.
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1957
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 2 OF 14 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AB WO 9936469 A UPAB: 19991026
NOVELTY - A polysaccharide conjugate comprising a polysaccharide with an
attached entity having a molecular weight of greater than or equals 5000,
capable of binding to cellulose, is new. It can be used to target binding
of an entity to cellulose.
USE - Products containing the conjugates include laundry products
such as fabric detergent or fabric conditioner (the attached entity may

be enzyme or particle bearing fragrance) (claimed); also personal products
(e.g. for targeting fragrance to bind to clothes); diagnostic test
systems; and paper products.

ADVANTAGE - The cellulose-binding polysaccharides are robust and
provide extra stability and product compatibility compared with other
targeting molecules.

Dwg.0/0

AN 1999-527200 [44] WPIDS
DNC C1999-154802
TI Polysaccharide conjugates capable of binding to cellulose and products
containing them.
DC A11 A96 A97 B04 D16 D25 F06 F09
IN BERRY, M J; DAVIS, P J; GIDLEY, M J
PA (BERR-I) BERRY M J; (UNIL) UNILEVER PLC; (UNIL) UNILEVER NV
CYC 84
PI WO 9936469 A1 19990722 (199944)* EN 34p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD
GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
UA UG UZ VN YU ZW
AU 9925150 A 19990802 (199954)
ZA 9900191 A 20000927 (200050) 31p
BR 9813358 A 20001003 (200053)
EP 1047725 A1 20001102 (200056) EN
R: DE ES FR GB IT
ADT WO 9936469 A1 WO 1998-EP8551 19981223; AU 9925150 A AU 1999-25150
19981223; ZA 9900191 A ZA 1999-191 19990112; BR 9813358 A BR 1998-13358
19981223, WO 1998-EP8551 19981223; EP 1047725 A1 EP 1998-966867 19981223,
WO 1998-EP8551 19981223
FDT AU 9925150 A Based on WO 9936469; BR 9813358 A Based on WO 9936469; EP
1047725 A1 Based on WO 9936469
PRAI EP 1998-300292 19980116

L6 ANSWER 3 OF 14 PDS COPYRIGHT 2000 DERWENT INFORMATION LTD

AB WO 9903351 A UPAB: 19990316

A **dough** and bread improving composition comprises (a) an enzyme having **galactose oxidase** activity, and (b) an oxidisable substrate for (a) and/or an enzyme which can convert a compound into this substrate. Also claimed is a method of preparing a flour **dough**.

USE - The composition is useful for improving the rheological characteristics of flour **dough** with a **dough** strengthening effect, without stickiness and/or slackness

ADVANTAGE - Any type of flour **dough** can be used, e.g. wheat flour based bread products, noodle products, alimentary paste product, etc.

Dwg.0/4

AN 1999-131751 [11] WPIDS

DNC C1999-038439

TI A **dough** and bread improving composition comprising a **galactose oxidase** and a substrate for it - useful for improving the rheological characteristics of flour **dough** with a **dough** strengthening effect, without stickiness and/or slackness.

DC D11-D16

IN ROUAU X; SCHRODER, M; SOE, J B

PA (DANI-N) DANISCO AS

CYC 83

PI WO 9903351 A1 19990128 (199911)* EN 41p

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
OA PT SD SE SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE
GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG
MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG
US UZ VN YU ZW

AU 9883347 A 19990210 (199925)

EP 999752 A1 20000517 (200028) EN

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

ADT WO 9903351 A1 WO 1998-DK335 19980716; AU 9883347 A AU 1998-83347
19980716;

EP 999752 A1 EP 1998-933577 19980716, WO 1998-DK335 19980716

FDT AU 9883347 A Based on WO 9903351; EP 999752 A1 Based on WO 9903351

PRAI US 1997-53451 19970722; DK 1997-878 19970718

L6 ANSWER 4 OF 14 AGRICOLA

AN 2000:124 AGRICOLA

DN CAT10979462

TI Carbohydrate biotechnology protocols.

AU Bucke, C.

AV DNAL (TP248.65.P64C37 1999)

LCN 98048663

SO c1999 xii, 337 p. : ill. ; 24 cm
Publisher: Totowa, N.J. : Humana Press, c1999.
Series: Methods in biotechnology ; 10
ISBN: 0896035638 (alk. paper).

NTE Includes bibliographical references and index.

Introduction to carbohydrate biotechnology -- Production and isolation of xanthan gum -- Alginate from *Zsotobacter vinelandii* -- Production of schizophyllan -- Enzymatic synthesis of cellulose -- Modification of alginate using mannurran C-5 epimerases -- Viscosity control of guar polysaccharide solutions by treatment with **galactose oxidase** and catalase enzymes -- The production of cyclodextrins using CGTase from *bacillus macerans* -- Production of microbial glycolipids

-- Partial enzymatic hydrolysis of starch to maltodextrins on the laboratory scale -- The production of alpha(1-2)-terminated glucooligosaccharides -- Enzymatic production of fructooligosaccharides from sucrose -- Enzymatic production of inulooligosaccharides from inulin -- One-pot enzymatic synthesis of sialyl T-epitope -- Hydrolysis of

hemicelluloses using combinations of **xylanases** and **arabinosyl**
 esterases -- Enzymatic depolymerization of chitins and chitosans --
 Synthesis of homo- and hetero-oligosaccharides from underivatized sugars
 using glycosidases -- Use of fluorophore-assisted carbohydrate
 electrophoresis (FACE) in the elucidation of n-linked oligosaccharide
 structures -- Application of sucrose synthase in the synthesis of
 nucleotide sugars and saccharides -- Production of isomaltulose using
 immobilized bacterial cells -- The production of mannitol by fermentation
 -- The production of 3-keto-derivatives of disaccharides -- Enzymatic
 synthesis of alpha-transglucosidase from *Aspergillus niger* -- Enzymatic
 glycosylation of aglycones of pharmacological significance -- Enzymatic
 synthesis of glycosides in aqueous-organic two-phase systems and
 supersaturated substrate solutions -- Use of beta-glucosidase in the
 development of flavor in wines and juices.

CY New Jersey; United States
 DT Bibliography; (MONOGRAPH)
 FS U.S. Imprints not USDA, Experiment or Extension
 LA English

L6 ANSWER 5 OF 14 FROSTI COPYRIGHT 2000 LFRA

AB Arabinogalactan-peptide (AGP) is a group of water-soluble macromolecules
 with a highly branched structure. The amino acid composition of the
 peptidic fraction could provide functional properties through serving as
 a link to the carbohydrate fraction. The possible use of wheat flour AGP
 or its degradation products as a substrate for an oxidative enzyme was
 evaluated with **galactose oxidase**. This enzyme could
 be an alternative oxidative enzyme for use in bread-making. The
 composition and depolymerization of wheat flour AGP were determined. The
 effects of selected enzymic activities on oxidation were also evaluated.
 A crude liquid enzyme preparation from *Aspergillus niger* displayed
 activities capable of depolymerizing wheat flour AGP to galactobiose,
galactose and arabinose. It could also produce substrate from the
 wheat flour AGP, associated with alpha-L-arabinofuranosidase.

AN 496464 FROSTI
 TI Production of substrate for **galactose oxidase** by
 depolymerization of an arabinogalactan-peptide from wheat flour.
 AU Schroder M.; Soe J.B.; Zargahi M.R.; Rouau X.
 SO Journal of Agricultural and Food Chemistry, 1999, (April), 47 (4),
 1483-1488 (19 ref.)
 ISSN: 0021-8561
 DT Journal
 LA English
 SL English

L6 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 1

AB **Hexose oxidase** (EC 1.1.3.5) (HOX) was purified 51-fold
 from the red algae *Chondrus crispus*, by several chromatog. methods,
 including hydrophobic interaction, chelating Sepharose, anion exchange,
 gel filtration, and chromatofocusing. Purified HOX was subjected to
 native PAGE and activity staining with nitroblue tetrazolium. For HOX
 electroeluted out of the gel and digested with endoproteinase Lys-C, the
 internal peptide sequence detd. was: D-P-G-Y-I-V-I-D-V-N-A-G-T-(V or
 P)-D-K-P-D-P-X. The mol. mass, detd. by gel filtration, was 126 kDa, vs.
 65 kDa detd. by SDS-PAGE. The pI was detd. to 4.64 and 4.79 as a double
 band on an isoelectrofocusing gel. Km was detd. to 2.7 mM for D-glucose,
 3.6 mM for D-**galactose**, 20.2 mM for cellobiose, 43.7 mM for
 maltose, 90.3 mM for **lactose**, 102 mM for xylose, and 531 mM for
 arabinose. The oxidn. of thiol groups in gluten was detd. by using
 Ellman's reagent: 5,5'-dithiobis (2-nitrobenzoic acid). The effect of

HOX was compared to that of glucose oxidase. Both enzymes caused a
 dose-responsive redn. in the free thiol groups. Extensi-graph
 measurements and baking tests confirmed that HOX caused increased
dough strength and increased bread vol. more efficiently than
 glucose oxidase using in the same dosage.

AN 1998:80318 CAPLUS

DN 128:166614
 TI Purification and characterization of a hexose oxidase with excellent strengthening effects in bread
 AU Poulsen, Charlotte; Hostrup, Pernille Bak
 CS Danisco Ingredients, Enzyme Development, Brabrand, 8220, Den.
 SO Cereal Chem. (1998), 75(1), 51-57
 CODEN: CECHAF; ISSN: 0009-0352
 PB American Association of Cereal Chemists
 DT Journal
 LA English

L6 ANSWER 7 OF 14 BIOBUSINESS COPYRIGHT 2000 BIOSIS
 AB **Hexose oxidase** (EC 1.1.3.5) (HOX) was purified 51-fold from the red algae *Chondrus crispus*, by several chromatography methods, including hydrophobic interaction, chelating Sepharose, anion exchange, gel filtration, and chromatofocusing. Purified HOX was subjected to native PAGE and activity staining with nitroblue tetrazolium. For HOX electroeluted out of the gel and digested with endoproteinase Lys-C, the internal peptide sequence determined was: D-P-G-Y-I-V-I-D-V-N-A-G-T-(V or P)-D-K-P-D-P-X. The molecular mass, determined by gel filtration, was 126 kDa, versus 65 kDa determined by SDS-PAGE. The pI was determined to 4.64 and 4.79 as a double band on an isoelectrofocusing gel. K-m was determined to 2.7 mM for D-glucose, 3.6 mM for D-galactose, 20.2 mM for cellobiose, 43.7 mM for maltose, 90.3 mM for lactose, 102 mM for xylose, and 531 mM for arabinose. The oxidation of thiol groups in gluten was determined by using Ellman's reagent: 5,5'-dithiobis (2-nitrobenzoic acid). The effect of HOX was compared to that of glucose oxidase. Both enzymes caused a dose-responsive reduction in the free thiol groups. Extensigraph measurements and baking tests confirmed that HOX caused increased dough strength and increased bread volume more efficiently than glucose oxidase used in the same dosage.

AN 1998:19785 BIOBUSINESS
 DN 0971608
 TI Purification and characterization of a hexose oxidase with excellent strengthening effects in bread.
 AU Poulsen C; Hostrup P B
 CS Danisco Ingredients, Enzyme Development, Edwin Rahrs Vej 38, 8220 Brabrand, Denmark.
 SO Cereal Chemistry, (1998) Vol.75, No.1, p.51-57.
 ISSN: 0009-0352.
 DT ARTICLE
 FS NONUNIQUE
 LA English

L6 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2000 ACS
 AB Rheol. measurements of dough and glutenin macro polymer systems were used to study effects of enzymes. Glucose oxidase improved the complex modulus (G*). Galactose oxidase under favorable conditions resulted in better dough rigidity and increased the elastic behavior of the dough. Lignin peroxidase gave the opposite effect. Lipoygenase increased G*, presumably due to oxidn. of protein polymers.

AN 1998:454862 CAPLUS
 DN 129:215945
 TI Application of oxidoreductases in baking: impact on gluten structure and dough rheology
 AU Van Der Lugt, J. P.; Somers, W. A. C.; Lichtendonk, W.; Orsel, R.
 CS TNO Nutrition and Food Research Institute, Zeist, 3700 AJ, Neth.
 SO Eur. Symp. Enzymes Grain Process., Proc., 1st (1997), Meeting Date 1996, 164-176. Editor(s): Angelino, S. A. G. F. Publisher: TNO Nutrition and Food Research Institute, Zeist, Neth.
 CODEN: 66KVAR
 DT Conference
 LA English

L6 ANSWER 9 OF 14 USPATFULL

AB Enzymatically active protein-enzyme complex membranes are prepared by treating a swollen protein membrane with an aqueous solution of a compatible active enzyme. These membranes are used to effect enzymatic reactions such as hydrolyzing starch, sucrose, urea or cellulose, lysis of cells or isomerizing D-glucose.

AN 86:41099 USPATFULL

TI Enzymatically active protein-enzyme complex membranes

IN Vieth, Wolf R., Belle Mead, NJ, United States

Wang, Shaw S., N. Brunswick, NJ, United States

Gilbert, Seymour G., Piscataway, NJ, United States

PA Research Corporation, New York, NY, United States (U.S. corporation)

PI US 4601981 19860722

AI US 1980-121478 19800214 (6)

DCD 19911022

RLI Continuation of Ser. No. US 1976-656384, filed on 9 Feb 1976, now abandoned which is a continuation of Ser. No. US 1974-439110, filed on

4

Feb 1974, now patented, Pat. No. US 3977941 which is a division of Ser. No. US 1971-135753, filed on 20 Apr 1971, now patented, Pat. No. US 3843446

DT Utility

EXNAM Primary Examiner: Naff, David M.

LREP Scully, Scott, Murphy & Presser

CLMN Number of Claims: 6

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 675

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 10 OF 14 USPATFULL

AB The amount of enzyme complexed to a protein membrane is increased by treating the protein before or after forming the membrane with a proteolytic enzyme. Preferred proteolytic enzymes are pepsin, trypsin and pronase. Treatment is carried out at a temperature between 15.degree. and 25.degree. C for a period of 1 to 12 hours. Enzymes are complexed to the protein membrane, after treatment, by swelling and washing the membrane and contacting the membrane with an enzyme.

AN 78:27895 USPATFULL

TI Preparation of enzyme-membrane complexes

IN Lin, Po-Min, 714 Bevier Rd., Piscataway, NJ, United States 08854

Giacin, Jack R., 2 Stanworth La., Allentown, NJ, United States 08501

Gilbert, Seymour G., 74 N. Ross Hall Blvd., Piscataway, NJ, United States 08854

Leeder, Joseph G., 379 Huff Rd., North Brunswick, NJ, United States 08902

PI US 4092219 19780530

AI US 1975-604131 19750813 (5)

DT Utility

EXNAM Primary Examiner: Naff, David M.

LREP Lerner, David, Littenberg & Samuel

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN 2 Drawing Figure(s); 1 Drawing Page(s)

LN.CNT 595

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 11 OF 14 USPATFULL

AB A composite membrane structure for immobilizing biologically active materials, such as enzymes, is formed by coating a microporous polymeric

membrane with a thin layer of an inert proteinaceous material, such as zein or collagen, so that the resultant coated membrane retains intercommunicating capillary pores that extend through its structure. Immobilization of a biologically active material is carried out by

contacting the wetted membrane with the biologically active material in solution and drying. Biologically active material immobilized on the membrane can be used to perform biochemical reactions and are useful in carrying out tests for glucose and uric acid.

AN 78:791 USPATFULL
TI Biologically active membrane material
IN Lai, Chung Jung, Watertown, MA, United States
Goldin, Stanley M., Norwood, MA, United States
PA Millipore Corporation, Bedford, MA, United States (U.S. corporation)
PI US 4066512 19780103
AI US 1976-684746 19760510 (5)
RLI Continuation of Ser. No. US 1974-503624, filed on 6 Sep 1974, now abandoned
DT Utility
EXNAM Primary Examiner: Naff, David M.
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 732

L6 ANSWER 12 OF 14 USPATFULL

AB Enzymatically active protein-enzyme complex membranes are prepared by treating a swollen protein membrane with an aqueous solution of a compatible active enzyme. These membranes are used to effect enzymatic reactions.

AN 76:47910 USPATFULL
TI Protein-enzyme complex membranes
IN Vieth, Wolf R., Belle Mead, NJ, United States
Wang, Shaw S., North Brunswick, NJ, United States
Gilbert, Seymour G., Piscataway, NJ, United States
PA Research Corporation, New York, NY, United States (U.S. corporation)
PI US 3977941 19760831
AI US 1974-439110 19740204 (5)
DCD 19911022
RLI Division of Ser. No. US 1971-135753, filed on 20 Apr 1971, now patented,
Pat. No. US 3843446
DT Utility
EXNAM Primary Examiner: Naff, David M.
LREP Oblon, Fisher, Spivak, McClelland & Maier
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 614
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 13 OF 14 FROSTI COPYRIGHT 2000 LFRA

AB A composition for **dough** and bread improvement is disclosed. It incorporates an enzyme with **galactose oxidase** activity and an oxidizable substrate for this enzyme. It is said to improve the rheological properties of flour **doughs** and the quality characteristics of bread products. Desirable quality characteristics include soft crumb structure, high specific volume, and freedom from staling within the expected shelf-life of fresh bread. **Galactose oxidase** acts as an oxidoreductase, and its use overcomes problems associated with use of cellulases or hemicellulases in flour **doughs**. Because the natural **galactose** content of **cereal flours** is very low, it is beneficial to include an oxidizable substrate in the formulation.

AN 489211 FROSTI
TI A composition comprising an enzyme having **galactose oxidase** activity and use thereof.
IN Rouau X.; Schroder M.; Soe J.B.
PA Danisco A/S
SO PCT Patent Application

PI WO 9903351 A1
AI 19980716
PRAI Denmark 19970718
United States 19970722
DT Patent
LA English
SL English

L6 ANSWER 14 OF 14 FROSTI COPYRIGHT 2000 LFRA
AB A composition for **dough** and bread improvement is disclosed. It incorporates an enzyme with **galactose oxidase** activity and an oxidizable substrate for this enzyme. It is said to improve the rheological properties of flour **doughs** and the quality characteristics of bread products. Desirable quality characteristics include soft crumb structure, high specific volume, and freedom from staling within the expected shelf-life of fresh bread.

Galactose oxidase acts as an oxidoreductase, and its use overcomes problems associated with use of cellulases or hemicellulases in flour **doughs**. Because the natural **galactose** content of **cereal flours** is very low, it is beneficial to include an oxidizable substrate in the formulation.

AN 526332 FROSTI
TI A composition comprising an enzyme having **galactose oxidase** activity and use thereof.
IN Rouau X.; Schroder M.; Soe J.B.
PA Danisco A/S
SO European Patent Application
PI EP 999752 A1
WO 9903351 19990128
AI 19980716
PRAI Denmark 19970718
United States 19970722
DT Patent
LA English
SL English

=> index bioscience, chemistry

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
FILE 'PAPERCHEM' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS

	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	63.16	68.86

	SINCE FILE	TOTAL
	ENTRY	SESSION
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)		
CA SUBSCRIBER PRICE	-1.11	-1.11

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI,
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO,
CABA,
CANCERLIT, CAPLUS, CEABA, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU,
DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 16:27:53 ON 16
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80 FILES IN THE FILE LIST IN STNINDEX

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search error messages that display as 0* with SET DETAIL OFF.

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2 FILE AGRICOLA
2 FILE BIOBUSINESS
0* FILE BIOCOMMERCE
2 FILE BIOSIS
0* FILE BIOTECHABS
0* FILE BIOTECHDS
0* FILE BIOTECHNO

12 FILES SEARCHED...

2 FILE CAPLUS
0* FILE CEABA
0* FILE CIN

27 FILES SEARCHED...

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0* FILE FOREGE
3* FILE FROSTI
1* FILE FSTA
0* FILE KOSMET

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0* FILE NTIS
2 FILE SCISEARCH
21 FILE USPATFULL

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0* FILE WPINDEX

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0* FILE INSPEC
0* FILE INSPHYS
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1 FILE PAPERCHEM2
0* FILE RAPRA
0* FILE RUSSCI
75 FILES SEARCHED...
0* FILE VTB
0* FILE WSCA

11 FILES HAVE ONE OR MORE ANSWERS, 80 FILES SEARCHED IN STNINDEX

L7 QUE (L1 (P) L2) AND L3

=> d rank

F1	21	USPATFULL
F2	3*	FROSTI
F3	2	AGRICOLA
F4	2	BIOBUSINESS
F5	2	BIOSIS
F6	2	CAPLUS
F7	2	SCISEARCH
F8	2	WPIDS
F9	1	PAPERCHEM2
F10	1*	ESBIOBASE
F11	1*	FSTA

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1	FILE AGRICOLA
1	FILE BIOBUSINESS
0*	FILE BIOCOMMERCE
1	FILE BIOSIS
0*	FILE BIOTECHABS
0*	FILE BIOTECHDS
11	FILES SEARCHED...
0*	FILE BIOTECHNO
0*	FILE CEABA
0*	FILE CIN
24	FILES SEARCHED...
0*	FILE ESBIOBASE
0*	FILE FOMAD
0*	FILE FOREGE
0*	FILE FROSTI
0*	FILE FSTA
37	FILES SEARCHED...
0*	FILE KOSMET
0*	FILE MEDICONF
0*	FILE NTIS
51	FILES SEARCHED...
1	FILE SCISEARCH
16	FILE USPATFULL
0*	FILE WPINDEX
57	FILES SEARCHED...
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0*	FILE APILIT2
0*	FILE BABS
0*	FILE CAOLD
0*	FILE CBNB
0*	FILE COMPENDEX
0*	FILE DKILIT

0* FILE IN EC
0* FILE IN CHYS
0* FILE METADEX
1 FILE PAPERCHEM2
73 FILES SEARCHED...
0* FILE RAPRA
0* FILE RUSSCI
0* FILE VTB
0* FILE WSCA

6 FILES HAVE ONE OR MORE ANSWERS, 80 FILES SEARCHED IN STNINDEX

L8 QUE L7 NOT L4

=> d rank

F1	16	USPATFULL
F2	1	AGRICOLA
F3	1	BIOBUSINESS
F4	1	BIOSIS
F5	1	SCISEARCH
F6	1	PAPERCHEM2

=> file f1-f6

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	12.15	81.01
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-1.11

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L10 20 DUP REM L9 (1 DUPLICATE REMOVED)

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L10 ANSWER 1 OF 20 USPATFULL

AB The present invention relates to detergent compositions comprising a cellulase termination composition and cellulase in order to prevent

potential tensile strength loss related to the hydrolytic activity of cellulase on cellulose substrates while maintaining the desired benefits

from the use of cellulase.
AN 2000:77334 USPTFULL
TI Cellulase activity control by a terminator
IN Baeck, Andre Cesar, Bonheiden, Belgium
Busch, Alfred, Londerzeel, Belgium
Convents, Andre Christian, Cincinnati, OH, United States
Paquette, Olivier, Strombeek-Bever, Belgium
PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)
PI US 6077818 20000620
WO 9730143 19970821
AI US 1998-125580 19981013 (9)
WO 1997-US2515 19970218
19981013 PCT 371 date
19981013 PCT 102(e) date
PRAI EP 1996-870013 19960220
DT Utility
EXNAM Primary Examiner: Fries, Kery
LREP Cook, C. Brant; Zerby, K. W.; Rasser, J. C.
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1852
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 2 OF 20 USPTFULL

AB Humanized anti-CD11a antibodies and various uses therefor are disclosed.
The humanized anti-CD11a antibody may bind specifically to human CD11a I-domain, have an IC50(nM) value of no more than about 1 nM for preventing adhesion of Jurkat cells to normal human epidermal keratinocytes expressing ICAM-1, and/or an IC50 (nM) value of no more than about 1 nM in the mixed lymphocyte response assay.

AN 2000:31527 USPTFULL
TI Humanized anti-CD11a antibodies
IN Jardieu, Paula M., San Francisco, CA, United States
Presta, Leonard G., San Francisco, CA, United States
PA Genentech, Inc., South San Francisco, CA, United States (U.S. corporation)
PI US 6037454 20000314
AI US 1997-974899 19971120 (8)
PRAI US 1996-31971 19961127 (60)
DT Utility
EXNAM Primary Examiner: Saunders, David; Assistant Examiner: VanderVegt, F. Pierre
LREP Lee, Wendy M.; Schwartz, Timothy R.
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN 8 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 3180
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 3 OF 20 USPTFULL

AB A first media provides an oxygen inducer such as catalase, bound and stabilized in pellet form so as to dissipate slowly into aqueous surroundings. A second media provides an oxygen supplier such as a peroxide, stabilized by combination with a proteinaceous compound such as urea and bound in a matrix that limits oxygen release. The two media are combined in aqueous environment to generate nascent oxygen at a modulated rate such that the oxygen is efficiently absorbed into the surrounding aqueous environment, promoting growth of aerobic species and reducing biological pollution. Specific adaptations demonstrate benefits

of use in shr or fish ponds, raw milk, fruit juice, fresh food, silage and animal feed, fertilizer, plumbing systems, and grease traps. When used in ponds, further adaptations reduce algae and phytoplankton populations.

AN 1999:27452 USPATFULL
TI Biochemical media system for reducing pollution
IN Reddy, Malireddy S., 78 Cherry Hills Farm Dr., Englewood, CO, United States 80110
Reddy, Syama M., 78 Cherry Hills Farm Dr., Englewood, CO, United States 80110
PI US 5876990 19990302
AI US 1996-731886 19961022 (8)
DT Utility
EXNAM Primary Examiner: Wyse, Thomas G.
LREP Rost, Kyle W.
CLMN Number of Claims: 44
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1806
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 4 OF 20 SCISEARCH COPYRIGHT 2000 ISI (R)
AB Water extractable arabinogalactan-peptide (WE-AGP) isolated from white wheat flour was depolymerized enzymatically to liberate substrate for a **galactose oxidase** from *Dactylium dendroides*. A crude liquid pectolytic preparation from *Aspergillus niger* (p70) displayed activities capable of converting WE-AGP into a substrate for **galactose oxidase**. The most favorable substrate was observed when WE-AGP was not fully depolymerized into **galactose** and arabinose, alpha-L-Arabinofuranosidase B from *A. niger* was also able to produce substrate from WE-AGP; arabinofuranosidase-treated WE-AGP was

a better substrate for **galactose oxidase** than **galactose**. Treatment by the crude p70 and purified enzymes showed that alpha-L-arabinofuranosidase was partly responsible for the production of substrate, whereas beta-galactosidase did not result in any substrate production or improve the effect of alpha-L-arabinofuranosidase. However, the positive effect of alpha-L-arabinofuranosidase was increased when p70 was added at the same level of arabinofuranosidase activity, suggesting that additional enzyme activities present in p70 were responsible for production of substrate for **galactose oxidase**.

AN 1999:336047 SCISEARCH
GA The Genuine Article (R) Number: 189HL
TI Production of substrate for **galactose oxidase** by depolymerization of an arabinogalactan-peptide from wheat flour
AU Schroder M; Soe J B; Zargahi M R; Rouau X (Reprint)
CS ECOLE NATL SUPER AGRON MONTPELLIER, INRA, UNITE TECHNOL CEREALES & AGROPOLYMERES, 2 PL VIALA, F-34060 MONTPELLIER 02, FRANCE (Reprint);
ECOLE NATL SUPER AGRON MONTPELLIER, INRA, UNITE TECHNOL CEREALES & AGROPOLYMERES, F-34060 MONTPELLIER 02, FRANCE; DANISCO INGREDIENTS, BRABRAND 8220, DENMARK
CYA FRANCE; DENMARK
SO JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, (APR 1999) Vol. 47, No. 4, pp. 1483-1488.
Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036.
ISSN: 0021-8561.
DT Article; Journal
FS LIFE; AGRI
LA English
REC Reference Count: 19
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L10 ANSWER 5 OF 20 USPATFULL

AB Uses for Wnt polypeptides in hematopoiesis are disclosed. In particular, in vitro and in vivo methods for enhancing proliferation or differentiation of a hematopoietic stem/progenitor cell using a Wnt polypeptide, and optionally another cytokine, are described.

AN 1998:159916 USPTFULL

TI Method of enhancing proliferation or differentiation of hematopoietic stem cells using Wnt polypeptides

IN Matthews, William, Woodside, CA, United States
Austin, Timothy W., Morgan Hill, CA, United States

PA Genentech, Inc., South San Francisco, CA, United States (U.S. corporation)

PI US 5851984 19981222

AI US 1996-696566 19960816 (8)

DT Utility

EXNAM Primary Examiner: Fitzgerald, David L.; Assistant Examiner: Basham, Daryl A.

LREP Svoboda, Craig G.; Marschang, Diane L.

CLMN Number of Claims: 20

ECL Exemplary Claim: 1

DRWN 4 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 3923

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 6 OF 20 AGRICOLA

AB **Hexose oxidase** (EC 1.1.3.5) (HOX) was purified 51-fold from the red algae *Chondrus crispus*, by several chromatography methods, including hydrophobic interaction, chelating Sepharose, anion exchange, gel filtration, and chromatofocusing. Purified HOX was subjected to native PAGE and activity staining with nitroblue tetrazolium. For HOX electroeluted out of the gel and digested with endoproteinase Lys-C, the internal peptide sequence determined was: D-P-G-Y-I-V-I-D-V-N-A-G-T-(V

or

P)-D-K-P-D-P-X. The molecular mass, determined by gel filtration, was 126 kDa, versus 65 kDa determined by SDS-PAGE. The pI was determined to 4.64 and 4.79 as a double band on an isoelectrofocusing gel. K(m) was determined to 2.7 mM for D-glucose, 3.6 mM for D-galactose, 20.2 mM for cellobiose, 43.7 mM for maltose, 90.3 mM for lactose, 102 mM for xylose, and 531 mM for arabinose. The oxidation of thiol groups in gluten was determined by using Ellman's reagent: 5,5'-dithio

bis

(2-nitrobenzoic acid). The effect of HOX was compared to that of glucose oxidase. Both enzymes caused a dose-responsive reduction in the free thiol groups. Extensigraph measurements and baking tests confirmed that HOX caused increased dough strength and increased bread volume more efficiently than glucose oxidase used in the same dosage.

AN 1998:76544 AGRICOLA

DN IND21643189

TI Purification and characterization of a hexose oxidase with excellent strengthening effects in bread.

AU Poulson, C.; Hostrup, P.B.

CS Danisco Ingredients, Brabrand, Denmark.

AV DNAL (59.8 C33)

SO Cereal chemistry, Jan/Feb 1998. Vol. 75, No. 1. p. 51-57

Publisher: St. Paul, Minn. : American Association of Cereal Chemists, 1924-

CODEN: CECHAF; ISSN: 0009-0352

NTE Includes references

CY Minnesota; United States

DT Article

FS U.S. Imprints not USDA, Experiment or Extension

LA English

L10 ANSWER 7 OF 20 USPTFULL

AB Polyspecific immunoconjugates and antibody composites that bind a multidrug transporter protein and an antigen associated with a tumor or

infectious agents are used to overcome the multidrug resistant phenotype.

These immunoconjugates and composites also can be used diagnostically to

determine whether the failure of traditional chemotherapy is due to the presence of multidrug resistant tumor cells, multidrug resistant HIV-infected cells or multidrug resistant infectious agents.

AN 97:117676 USPATFULL

TI Polyspecific immunoconjugates and antibody composites for targeting the multidrug resistant phenotype

IN Goldenberg, David M., Mendham, NJ, United States

PA Immunomedics, Inc., Morris Plains, NJ, United States (U.S. corporation)

PI US 5698178 19971216

AI US 1996-629387 19960408 (8)

RLI Division of Ser. No. US 1994-286430, filed on 5 Aug 1994

DT Utility

EXNAM Primary Examiner: Chan, Christina Y.; Assistant Examiner: Cech, Emma

LREP Foley & Lardner

CLMN Number of Claims: 24

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 2203

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 8 OF 20 USPATFULL

AB Polyspecific immunoconjugates and antibody composites that bind a multidrug transporter protein and an antigen associated with a tumor or infectious agent are used to overcome the multidrug resistant phenotype.

These immunoconjugates and composites also can be used diagnostically to

determine whether the failure of traditional chemotherapy is due to the presence of multidrug resistant tumor cells, multidrug resistant HIV-infected cells or multidrug resistant infectious agents.

AN 97:104602 USPATFULL

TI Polyspecific immunoconjugates and antibody composites for targeting the multidrug resistant phenotype

IN Goldenberg, David M., Mendham, NJ, United States

PA Immunomedics, Inc., Morris Plains, NJ, United States (U.S. corporation)

PI US 5686578 19971111

AI US 1994-286430 19940805 (8)

DT Utility

EXNAM Primary Examiner: Eisenschenk, Frank C.

LREP Foley & Lardner

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 2133

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 9 OF 20 USPATFULL

AB An anticaking agent which reduces the stickiness of the chunked, diced, or shredded cheese and improves the functionality of cheese is formulated of fine mesh vegetable flour, bentonite, cellulose, and antimycotic agents or bacterial cultures. This anticaking agent also will reduce the yeast and mold growth. This discovery is also extended to include various flavors, colors, enzymes and other supplements into the anticaking agent, to ultimately add to the cheese.

AN 97:38239 USPATFULL

TI Method of treating a divided cheese product for anticaking

IN Reddy, Malireddy S., 78 Cherry Hills Farm Dr., Englewood,, CO, United States 80110

PI US 5626893 19970506

AI US 1994-324897 19941018 (8)

DT Utility

EXNAM Primary Examiner: Wong, Leslie

LREP Rost, Kyle W.
CLMN Number of Claims: 33
ECL Exemplary Claim: 20
DRWN No Drawings
LN.CNT 1408
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 10 OF 20 USPATFULL

AB The invention relates to recombinant DNA technology for the production of an enzyme having sulfhydryl oxidase ("SOX") activity. This SOX-enzyme

can be used where the oxidation of free sulfhydryl groups (thio compounds) to the corresponding disulfides is desirable. SOX enzyme may be used for treatment of bakery products or for removal of off-flavour from milk or beer.

AN 96:55683 USPATFULL

TI Cloning and expression of DNA encoding a ripening form of a polypeptide having sulfhydryl oxidase activity

IN Maat, Jan, Monster, Netherlands
Musters, Wouter, Maassluis, Netherlands
Stam, Hein, Diemen, Netherlands
Schaap, Peter J., Hoorn, Netherlands
van de Vonderwoort, Peter J., Wageningen, Netherlands
Visser, Jacob, Wageningen, Netherlands
Verbakel, Johannes M., Maasland, Netherlands

PA Unilever Patent Holdings BV, Netherlands (non-U.S. corporation)

PI US 5529926 19960625

AI US 1995-423441 19950419 (8)

RLI Continuation of Ser. No. US 1993-44620, filed on 9 Apr 1993, now abandoned

PRAI EP 1992-201027 19920410

DT Utility

EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Kim, Hyosuk

LREP Cushman Darby & Cushman

CLMN Number of Claims: 6

ECL Exemplary Claim: 1

DRWN 23 Drawing Figure(s); 18 Drawing Page(s)

LN.CNT 1849

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 11 OF 20 BIOBUSINESS COPYRIGHT 2000 BIOSISDUPLICATE 1

AN 96:71597 BIOBUSINESS

DN 0836458

TI Application of oxidoreductases in baking: Impact of some oxidoreductases on gluten structure and **dough** rheology.

AU Somers W A C; Orsel R; Van Der Lugt J P

CS TNO Nutrition Food Res. Inst., P.O. Box 360, 3700 AJ Zeist, Netherlands

SO Cereal Foods World, (1996) Vol.41, No.7, P.550.
81st Annual Meeting of the American Association of Cereal Chemistry, Baltimore, Maryland, USA, September 15-19, 1996. CEREAL FOODS WORLD.

ISSN: 0146-6283.

DT CONFERENCE

FS NONUNIQUE

LA ENGLISH

L10 ANSWER 12 OF 20 USPATFULL

AB A newly discovered lignin peroxidase enzyme is provided. The enzyme is obtained from a bacterial source and is capable of degrading the lignin portion of lignocellulose in the presence of hydrogen peroxide. The enzyme is extracellular, oxidative, inducible by lignin, larch wood **xylan**, or related substrates and capable of attacking certain lignin substructure chemical bonds that are not degradable by fungal lignin peroxidases.

AN 93:27027 USPATFULL

TI Bacterial extracellular lignin peroxidase

IN Crawford, Don L., Moscow, ID, United States
Ramachandra, Malidhara, Moscow, ID, United States
PA Idaho Research Foundation, Incorporation, Moscow, ID, United States
(U.S. corporation)
PI US 5200338 19930406
AI US 1988-277802 19881130 (7)
DT Utility
EXNAM Primary Examiner: Brown, Johnnie R.; Assistant Examiner: Webber, Pamela S.
LREP Cooley Godward Castro Huddleson & Tatum
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 816
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 13 OF 20 USPATFULL

AB The invention relates to amine-containing porphyrin derivatives. The porphyrins can be used as photosensitizers which are useful as therapeutic agents. Also described are methods for preparing conjugates in which a porphyrin derivative is covalently attached to an antibody

or

antibody fragment. In vivo therapeutic methods utilizing the conjugates are also desired.

AN 92:86771 USPATFULL

TI Amine-containing porphyrin derivatives

IN Goers, John W. F., Atascadero, CA, United States
King, Hurley D., Yardley, PA, United States
Lee, Chyi, New Brunswick, NJ, United States
Coughlin, Daniel J., Plainsboro, NJ, United States
Alvarez, Vernon L., Morrisville, PA, United States
Rodwell, John D., Yardley, PA, United States
McKearn, Thomas J., New Hope, PA, United States

PA Cytogen Corporation, Princeton, NJ, United States (U.S. corporation)

PI US 5156840 19921020

AI US 1989-327881 19890320 (7)

RLI Division of Ser. No. US 1984-650375, filed on 13 Sep 1984, now patented,

Pat. No. US 4867973, issued on 19 Sep 1989 which is a continuation-in-part of Ser. No. US 1982-442050, filed on 16 Nov 1982, now abandoned which is a continuation-in-part of Ser. No. US 1982-356315, filed on 9 Mar 1982, now patented, Pat. No. US 4671958, issued on 9 Jun 1987

DT Utility

EXNAM Primary Examiner: Friedman, Stanley J.

LREP Pennie & Edmonds

CLMN Number of Claims: 1

ECL Exemplary Claim: 1

DRWN 10 Drawing Figure(s); 8 Drawing Page(s)

LN.CNT 2194

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 14 OF 20 USPATFULL

AB Disclosed are novel 5-C-hydroxymethylhexose compounds and their derivatives which exhibit sugar-like functionality when used in food compositions. The derivatives include stereoisomers, di-, tri-, and polysaccharides, alkyl glycosides, polyol, and alditol derivatives.

Also

disclosed are sugar substitute compositions and food compositions containing these compounds and their derivatives.

AN 92:31988 USPATFULL

TI Functional sugar substitutes with reduced calories

IN Mazur, Adam W., Cincinnati, OH, United States

PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)

PI US 5106967 19920421

AI US 1991-70644 19910528 (7)
RLI Division of Ser. No. US 1991-653333, filed on 11 Feb 1991, now patented,

Pat. No. US 5041541, issued on 20 Aug 1991 which is a division of Ser. No. US 1989-339531, filed on 20 Apr 1989, now patented, Pat. No. US 5064672, issued on 12 Nov 1991 which is a continuation-in-part of Ser. No. US 1988-190486, filed on 5 May 1988, now abandoned

DT Utility

EXNAM Primary Examiner: Brown, Johnnie R.; Assistant Examiner: Carson, Nancy S.

LREP Dabek, Rose Ann; Yetter, Jerry J.; Witte, Richard C.

CLMN Number of Claims: 12

ECL Exemplary Claim: 1,6

DRWN No Drawings

LN.CNT 961

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 15 OF 20 USPATFULL

AB Disclosed are novel 5-C-hydroxymethylhexose compounds and their derivatives which exhibit sugar-like functionality when used in food compositions. The derivatives include stereoisomers, di-, tri-, and polysaccharides, alkyl glycosides, polyol, and alditol derivatives.

Also

disclosed are sugar substitute compositions and food compositions containing these compounds and their derivatives.

AN 91:92371 USPATFULL

TI Functional sugar substitutes with reduced calories

IN Mazur, Adam W., Cincinnati, OH, United States

PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)

PI US 5064672 19911112

AI US 1991-653333 19910211 (7)

RLI Division of Ser. No. US 1989-339531, filed on 20 Apr 1989 which is a continuation-in-part of Ser. No. US 1988-190486, filed on 5 May 1988, now abandoned

DT Utility

EXNAM Primary Examiner: Golian, Joseph

LREP Dabek, R. A.; Yetter, J. J.; Witte, R. C.

CLMN Number of Claims: 11

ECL Exemplary Claim: 1,5

DRWN No Drawings

LN.CNT 1014

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 16 OF 20 USPATFULL

AB Disclosed are novel 5-C-hydroxymethylhexose compounds and their derivatives which exhibit sugar-like functionality when used in food compositions. The derivatives include stereoisomers, di-, tri-, and polysaccharides, alkyl glycosides, polyol, and alditol derivatives.

Also

disclosed are sugar substitute compositions and food compositions containing these compounds and their derivatives.

AN 91:66894 USPATFULL

TI Functional sugar substituted with reduced calories

IN Mazur, Adam W., Cincinnati, OH, United States

PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)

PI US 5041541 19910820

AI US 1989-339531 19890420 (7)

RLI Continuation-in-part of Ser. No. US 1988-190486, filed on 5 May 1988, now abandoned

DT Utility

EXNAM Primary Examiner: Brown, Johnnie R.; Assistant Examiner: Carson, Nancy S.

LREP Dabek, Rose Ann; Yetter, Jerry J.; Witte, Richard C.

CLMN Number of Claims: 31

ECL Exemplary Claim 1
DRWN No Drawings
LN.CNT 1032
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 17 OF 20 USPATFULL

AB A sulfhydryl oxidase, which is a flavor protein, and a method of isolating the same from a culture of the microorganism *Aspergillus niger*. The claimed sulfhydryl oxidase has a molecular weight of about 106,000 and a pH optimum of about 5.5 for oxidation of glutathione in

an acetate buffer at 250.degree. C.

AN 90:4348 USPATFULL

TI Microbial sulfhydryl oxidase and method

IN Hammer, Frank E., Schaumburg, IL, United States

Scott, Don, Schaumburg, IL, United States

Wagner, Fred W., Lincoln, NE, United States

Ray, Lee, Elk Grove Village, IL, United States

de la Motte, Rebecca S., Lincoln, NE, United States

PA Suomen-Sokeri Oy, Helsinki, Finland (non-U.S. corporation)

PI US 4894340 19900116

AI US 1987-136723 19871221 (7)

DT Utility

EXNAM Primary Examiner: Rosenberg, Peter D.

LREP Baker & McKenzie

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN 10 Drawing Figure(s); 5 Drawing Page(s)

LN.CNT 1084

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 18 OF 20 USPATFULL

AB This invention relates to antibody-therapeutic agent conjugates having a

therapeutic agent covalently attached to an antibody or antibody fragment. Also described are methods for intermediates in the preparation of antibody conjugates. Therapeutic in vivo methods utilizing such antibody-therapeutic agent conjugates are described.

AN 89:78541 USPATFULL

TI Antibody-therapeutic agent conjugates

IN Goers, John W. F., Atascadero, CA, United States

King, Hurley D., Yardley, PA, United States

Lee, Chyi, New Brunswick, NJ, United States

Coughlin, Daniel J., Plainsboro, NJ, United States

Alvarez, Vernon L., Morrisville, PA, United States

Rodwell, John D., Yardley, PA, United States

McKearn, Thomas J., New Hope, PA, United States

PA Cytogen Corporation, Princeton, NJ, United States (U.S. corporation)

PI US 4867973 19890919

AI US 1984-650375 19840913 (6)

DCD 20040609

RLI Continuation-in-part of Ser. No. US 1984-646328, filed on 31 Aug 1984 And Ser. No. US 1984-646327, filed on 31 Aug 1984, each which is a continuation-in-part of Ser. No. US 1982-442050, filed on 16 Nov 1982, now abandoned which is a continuation-in-part of Ser. No. US 1982-356315, filed on 9 Mar 1982, now patented, Pat. No. US 4671958

DT Utility

EXNAM Primary Examiner: Teskin, Robin L.

LREP Pennie & Edmonds

CLMN Number of Claims: 79

ECL Exemplary Claim: 1

DRWN 10 Drawing Figure(s)

LN.CNT 2645

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 19 OF 20 USPATFULL

AB The disaccharide .beta.-D-Gal (1->>3)-D-GalNAc which specifically binds

with peanut agglutinin (PNA) or oxidized by **galactose oxidase**, has been discovered in the colorectal mucus of patients with cancer or precancer. Because of the presence of .beta.-D-Gal-(1->>3)-D-GalNAc also on neuraminidase treated erythrocytes of the ABO type, their competitive binding with PNA has been exploited to develop a hemagglutination inhibition assay. Additional methods of simple detection of this disaccharide include a latex agglutination test, enzyme-avidin-biotinylated PNA, and a **galactose oxidase** strip test. This rapid, simple and inexpensive assay is designed to test the presence of .beta.-D-Gal-(1->>3)-D-GalNAc in large intestine mucus obtained by routine digital-rectal examination and has the potential for screening populations for large intestinal

carcinomas.

AN 89:67403 USPATFULL

TI Screening test for large intestinal cancer

IN Shamsuddin, Abulkalam M., 2916 Old Court Rd., Baltimore, MD, United States 21208

Elsayed, Alaaeldeen M., 6458 Root Dr., Glen Burnie, MD, United States 21061

Jockle, Glenn A., 511 S. Sharp St., Baltimore, MD, United States 21201

PI US 4857457 19890815

AI US 1986-889022 19860724 (6)

DT Utility

EXNAM Primary Examiner: Kepplinger, Esther M.

LREP Haight & Associates

CLMN Number of Claims: 16

ECL Exemplary Claim: 1

DRWN 3 Drawing Figure(s); 2 Drawing Page(s)

LN.CNT 451

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 20 OF 20 PAPERCHEM2 COPYRIGHT 2000 IPST

AB Optimized conditions were devised for the oxidn. of polysaccharides contg. terminal D-galactopyranosyl residues to new polysaccharides contg. uronic acid, by a known 2-stage sequence employing **D-galactose oxidase** and halogen. The isolation of D-galacturonic acid (as galactaric acid) from the hydrolyzates of an oxidized galactomannan confirms the conversion of D-galactopyranosyl residues into D-galactopyranosyluronic acid residues in that polymer. An aldobiouronic acid thought to be 6-O-(alpha-D-galactopyranosyluronic acid)-D-mannose

was

detected in the partial acid hydrolyzate of this galacturonogalactomannan derived from guaran. Acidic fragments contg. D-galacturonic acid were isolated from the partial acid hydrolyzates of oxidized

galactoglucomannan

of spruce and oxidized arabinogalactan of larch; this indicates that the 2-stage sequence will oxidize D-galactopyranosyl residues attached by alpha-D or beta-D glycosidic bonds to polysaccharides of structural complexity greater than that of the galactomannan of guaran. The

decrease

in mol.wt. of the larch arabinogalactan, together with the nonquant. relationship between the disappearance of D-galactopyranosyl residues and the appearance of uronic acid, as a result of the oxidns., suggests that the reactions of this polymer do not follow a simple scheme. The devt.

of

a refined technique for the elucidation of the nature of the D-galactopyranosyl residues of polysaccharides will have to depend upon more certain knowledge of the action and specificity of the enzyme than

is

at present available. 23 ref.

AN 68:5474 PAPERCHEM2

SN 000015227

DN AB3905474

TI OXIDATION OF D-GALACTOPYRANOSYL RESIDUES OF POLYSACCHARIDES TO

D-GALACTOPYRANOSURONIC ACID RESIDUES
AU Rogers, J. K.; Simpson, N. S.
SO Carbohyd. Res., (May, 1968) Vol. 7, no. 1, pp. 66-75.
DT Journal
FS PAPERCHEM
LA UNAVAILABLE